

REMARKS

Reconsideration of the application is requested.

Claims 9-18 are pending in the present application. Claims 9 and 13 were amended in this response. Support for the amendments can be found in the original claims filed on February 24, 2006 and in paragraphs [009] and [0015].

Claims 9-10-11 and 14 have been rejected under 35 USC 103(a) as unpatentable over Xiong, further in view of Corbalis. The rejection is respectfully traversed.

With respect to claim 9, the Examiner states that Xiong teaches:

1) “a method for transmitting data packets between a first communication network node and a second communication network node; 2) “reserving a data channel” ; 3) “transmitting a first data burst having aggregated data packets” on the data channel; 4) “retaining the data channel for a consecutive transmission phase” after transmitting a first data (burst); 5) “transmitting additional data packets between the nodes during the consecutive transmission phase (column 2, line 37-40”).

With respect to 1) “a method for transmitting data packets...”: Only the transmission of burst is disclosed by Xiong. The purpose of the Xiong invention is disclosed in col. 2, line 37-40 which states: “The present invention provides yet another technical advantage by reducing the gaps/voids between bursts transmitted on reserved data channels, which in turn increase the data channel utilization.” Xiong describes only the transmission of data burst and not the transmission of non aggregated (IP) data packets on-the-fly as required by the claimed invention. This general feature does neither explain how the data packets are transmitted nor if data burst and non aggregated data packets are transmitted. In contrast to Xiong, in the present invention bursts and data packets are transmitted (FIG 2).

With respect to 2) “reserving a data channel...”: In a conventional optical burst switching system, first a time slot is reserved for transmitting a data burst, and the channel is only blocked for other connections while said data burst is

transmitted. Xiong uses this method for conventional transmission of data bursts too. Xiong describes (col 9, lines 66-67 and more exact in col. 4, lines 33-47 and in addition column 8, lines 27-42) that according to his invention a channel (wavelength) in a “reserved state” is completely reserved for the transmission via a single connection; that means the channel is blocked for all other connections and “bursts cannot be scheduled on the reserved data channel in the normal way” (column 4, lines 44-47). The channel reservation is controlled by the traffic at the sending node and only this node cancels the reservation when the traffic drops below a threshold (col.8, lines 35-38).

According to the instant invention, the channel $\lambda 1$ is a priory reserved for the transmission of a single data burst BURST1. This is the standard burst reservation method, which is explained in paragraph [0017] of the filed Substitute Specification . Then the connection – not the reservation – is retained for transmitting data packets in the consecutive phase. According to [0017] and [0018] the consecutive phase is regarded as free and can be interrupted for other burst traffic connections transmitting BURST2 (FIG 2 and [0017]) as soon as this is required. The channel is not blocked as taught by Xiong (col. 4, lines 33-47) but can be used for additional connections.

With respect to 3) “transmitting a first data burst having aggregated data packets...”: Xiong and the system in the instant invention are transmitting a first data burst (and a plurality of bursts) via a new connection. However, in the instant invention, after the first burst is transmitted and the channel is available during the consecutive phase, only data packets are transmitted on-the-fly.

With respect to 4) “retaining the data channel for a consecutive transmission phase....”: This can not be derived from Fig 2 showing an optical network. Xiong teaches a reservation of the data channel as explained under 2), which is quite different from retaining this channel for further transmission of non aggregated data packets as already explained above. According to the instant invention, the “retaining connection” is used to transmit further data packets over the channel. The connection is interrupted as soon the channel is needed for another connection.

With respect to 5) “transmitting additional packets between the nodes during the consecutive transmission phase”: Xiong, at column 2, line 37-40, explains that only the gaps between bursts are reduced. Xiong only discloses that data bursts are transmitted.

See also 1). Again, Xiong transmits only data burst, but not non aggregated data packets. According to the instant invention the non aggregated data packets are transmitted “on-the-fly”, as explained by FIG 2 and the description.

The Examiner states that Xiong is silent but Corbalis teaches terminating the connection only when the data channel is at least partially required for transmitting a second data burst. Applicants respectfully disagree. Xiong explains, at col. 4, lines 58-61: “If the bit rate of a flow of bursts drops below the given threshold, part of the reserved data channel 205 is not being used that, thus reservation of the data channel 205 will be terminated”. Regarding Xiong, col. 4, line 54 the reservation of a channel and the reservation termination is executed by the transmitting node according to the data rate. According to the instant invention, no channel reservation is done for an “on-the-fly” connection, which may be interrupted for an additional connection.

The Examiner further cites Corbalis, at column 1, lines 54-55, which states in part: “Problems with re-arrangeable non-blocking switches include the fact that the required device settings to route connections through the switch are not determined easily and that connections in progress may have to be interrupted momentarily while rerouting takes place to handle the new connections.” (Corbalis, column 1, lines 53-58/59). However Corbalis discloses a switch fabric, which does not relate to the instant invention. As described in Corbalis, at col. 1, lines 54-59: “Problems with re-arrangeable non-blocking switches include the fact that connections in progress may have to be interrupted momentarily while rerouting takes place to handle new connections”.

Claims 12, 13 and 18 have been rejected under 35 USC 103(a) as unpatentable over Xiong, Corbalis, further in view of Garland. Claim 15 has been rejected under 35 USC 103(a) as unpatentable over Xiong, Corbalis, further in view of Stilling; and claims 16-17 have been rejected under 35 USC 103(a) as unpatentable over Xiong, Corbalis, and Stilling, further in view of Garland. The

Application No. 10/569,780
Amendment dated 7/15/10
Reply to Office action of 4/15/10

rejection are respectfully traversed for at least the reasons presented in the arguments above.

In light of the foregoing, Applicants respectfully submit they have addressed each and every item presented by the examiner in this Office Action. Favorable reconsideration of all of the claims, as amended, is earnestly solicited. Applicants submit that the present application, with the foregoing claim amendments and accompanying remarks, is in condition for allowance and respectfully request such allowance.

In the event that any further matters requiring attention are noted by the examiner, or in the event that prosecution of this application can otherwise be advanced thereby, a telephone call to Applicant's undersigned representative at the number shown is invited.

Please charge any other fees that might be due with respect to Sections 1.16 and 1.17 to Deposit Account Number 12-1099 of Lerner Greenberg Stemer LLP.

Respectfully submitted,

/Laurence A. Greenberg/
Laurence A. Greenberg
Reg. No. 29,308

July 15, 2010

Lerner Greenberg Stemer LLP
P.O. Box 2480
Hollywood, Florida 33022-2480
Tel.: (954) 925-1100
Fax: (954) 925-1101

LAG/rr